

Substitute for form 1449/PTO

INFORMATION DISCLOSURE
STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Complete if Known

Application Number	10/758,237
Filing Date	January 15, 2004
First Named Inventor	Hackett et al.
Art Unit	1646 1636
Examiner Name	Unknown D. Sullivan
Attorney Docket Number	3021.15US02

Sheet 1

of

4

EXAMINER INITIAL [*]	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document
		Number-Kind Code ² (if known)		
DS		US-5,110,802	05-05-1992	Cantin et al.
		US-5,144,019	09-01-1992	Rossi et al.
		US-5,149,796	09-22-1992	Rossi et al.
		US-5,272,262	12-21-1993	Rossi et al.
		US-5,610,053	03-11-1997	Chung et al.
		US-5,626,877	05-06-1997	Amsden et al.
		US-5,731,178	03-24-1998	Sippel et al.
		US-5,750,380	05-12-1998	Itakura et al.
		US-5,891,108	04-06-1999	Leone et al.
		US-5,972,027	10-26-1999	Johnson
		US-5,985,661	11-16-1999	Rossi
		US-6,013,516	01-11-2000	Verma et al.
		US-6,041,252	03-21-2000	Walker et al.
		US-6,071,305	06-06-2000	Brown et al.
		US-6,074,673	06-13-2000	Guillen
		US-6,083,996	07-04-2000	Buyuktimkin et al.
		US-6,086,582	07-11-2000	Altman et al.
DS		US-6,086,912	07-11-2000	Gilman

FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL [*]	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	T ⁶
		Country Code ³ Number ⁴ Kind Code ⁵ (if known)			
DS		EP 0 694 070	04-10-2002	Dubensky et al.	
		EP 0 777 739 English language	04-05-2000	Sedlacek et al.	
		EP 0 804 601 Drawings and	03-14-2001	Sedlacek	
		EP 0 807 183 Claims only	01-03-2001	Sedlacek	
		WO 92/06988	04-30-1992	Rossi et al.	
DS		WO 95/07994	03-23-1995	Dubensky et al.	

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This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450 Alexandria, VA 22313-1450.

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DS		US-6,100,448	08-08-2000	Thompson et al.
		US-6,110,498	08-29-2000	Rudnic et al.
		US-6,126,919	10-03-2000	Stefely et al.
		US-6,132,765	10-17-2000	DiCosmo et al.
		US-6,136,295	10-24-2000	Edwards et al.
		US-6,142,939	11-07-2000	Eppstein et al.
		US-6,235,312	05-22-2001	Hobbs et al.
		US-6,235,313	05-22-2001	Mathiowitz et al.
		US-6,245,349	06-12-2001	Yiv et al.
		US-6,251,079	06-26-2001	Gambale et al.
		US-6,283,947	09-04-2001	Mirzaee
		US-6,283,949	09-04-2001	Roorda
		US-6,287,792	09-11-2001	Pardridge et al.
		US-6,296,621	10-02-2001	Masuda et al.
		US-6,296,832	10-02-2001	Ruoslahti et al.
		US-6,309,370	10-30-2001	Haim et al.
		US-6,309,375	10-30-2001	Glines et al.
DS		US-6,309,380	10-30-2001	Larson et al.

FOREIGN PATENT DOCUMENTS					
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DS		WO 95/19788	07-27-1995	Rossi et al.	
		WO 99/25817	05-27-1999	Sandberg	
		WO 99/46372	09-16-1999	Rossi et al.	
		WO 00/23606	04-27-2000	Tuan et al.	
DS		WO 00/60115	10-12-2000	Rossi	

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DS		US-6,309,410	10-30-2001	Kuzma et al.
		US-6,317,629	11-13-2001	Haak et al.
		US-6,346,272	02-12-2002	Viegas et al.
		US-6,350,780	02-26-2002	Garst et al.
		US-6,379,382	04-30-2002	Yang
		US-6,387,124	05-14-2002	Buscemi et al
		US-6,387,397	05-14-2002	Chen et al.
		US-6,395,549	05-28-2002	Tuan et al.
		US-6,489,458	12-03-2002	Hackett et al.
		US-6,562,570	05-13-2003	Rossi et al.
		US-2003/0036056	02-20-2003	Rossi et al.
		US-2003/0119017	06-26-2003	McSwiggen
		US-2003/0124513	07-03-2003	McSwiggen
DS		US-2003/0125281	07-03-2003	Lewis et al.

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DS		WO 00/68399	11-16-2000	McIvor et al	
		WO 01/30965	05-03-2001	Kay et al.	
		WO02/097114	12-05-2002	McSwiggen	
		WO02/044321	06-06-2002	Tuschl et al.	
		WO03/008573	07-17-2001	Milner	
		WO03/020931	03-13-2003	Arts et al.	
DS		WO03/056022	07-10-2003	Radcliffe et al.	

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		Number-Kind Code ² (if known)		
DS		US-2003/0130186	07-10-2003	Vargeese et al.
		US-2003/0139363	07-24-2003	Kay et al.
		US-2003/0144239	07-31-2003	Agami et al.
		US-2003/0148519	08-07-2003	Engelke et al.
		US-2003/0153519	08-14-2003	Kay et al.
		US-2003/0157691	08-21-2003	Qin et al.
		US-2003/0166282	09-04-2003	Brown et al.
DS		US-2003/0166512	09-04-2003	Xie
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DS		WO03/066650	08-14-2003	Prydz et al.	
		WO03/68797	08-21-2003	Rossi et al.r	
		WO03/070193	08-28-2003	McSwiggen	
		WO03/070750	08-28-2003	McSwiggen et al.	
		WO03/070895	08-28-2003	McSwiggen et al.	
		WO03/700914	08-28-2003	McSwiggen et al.	
DS		WO03/070918	02-20-2003	McSwiggen et al.	

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		Number-Kind Code ² (if known)		
DS		US-2002/0019049	02-14-2002	Lok
DS		US-2003/0211481	11-13-2003	Erives et al.
		US-		
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NON PATENT LITERATURE DOCUMENTS				
EXAMINER INITIAL*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published		T ²
DS		AKASAKA ET AL., 1999. Upstream element of the sea urchin arylsulfatase gene serves as an insulator. Cell Mol Biol 45: 555-565.		
		AKERLEY ET AL, (1998). Systematic identification of essential genes by in vitro mariner mutagenesis. Proc. Natl. Acad. Sci. USA 95: 8927-8932.		
		AMANUMA ET AL, (2000). Transgenic zebrafish for detecting hazardous mutations caused by compounds in aquatic environments. Nature Biotech. 18: 62-65.		
		AMSTERDAM ET AL., 1995. The Aequorea victoria green fluorescent protein can be used as a reporter in live zebrafish embryos. Dev Biol 171: 123-129.		
		AMSTERDAM ET AL., 1996. Requirements for green fluorescent protein detection in transgenic zebrafish embryos. Gene 173:99-103.		
		ANDERSON (1998). Human gene therapy. Nature 392 (suppl): 25-30.		
		ARAI ET AL., 1994. Position-independent, high-level, and correct regional expression of the rat aldolase C gene in the central nervous system of transgenic mice. Eur J Biochem 221: 253-260.		
		AUSUBEL ET AL, (1994). Current Protocols in Molecular Biology, Contents V. 1, 2, and 3. Table of Contents.		
		BARGES ET AL., 2000. The Fab-8 boundary defines the distal limit of the bithorax complex iab-7 domain and insulates iab-7 from initiation elements and a PRE in the adjacent iab-8 domain. Development 127: 779-790.		
		BELGRADER ET AL., 1991. A comprehensive study on the isolation and characterization of the HeLa S3 nuclear matrix. J Cell Sci 98: 281-291.		
		BELGRADER ET AL., 1991. Molecular cloning of matrin 3. A 125-kilodalton protein of the nuclear matrix contains an extensive acidic domain. J Biol Chem 266:9893-9.		
DS		BELL ET AL., (1999). The protein CTCF is required for the enhancer blocking activity of vertebrate insulators. Cell 98: 387-396.		
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DS		BELL ET AL., (2001). Insulators and boundaries: versatile regulatory elements in the eukaryotic genome. Science 291: 447-450.			
		BELUR ET AL.. "Integration and long-term expression in lung mediated by the Sleeping Beauty transposon system." Mol. Therapy 8: 501-507 (2003).			
		BERRIOS ET AL., 1985. In situ localization of DNA topoisomerase II, a major polypeptide component of the Drosophila nuclear matrix fraction. Proc Natl Acad Sci USA 82: 4142-4126.			
		BESTOR ET AL., (1998). Methylation meets acetylation. Nature 393: 311-312.			
		BIRD ET AL., 1997). Does DNA methylation control transposition of selfish elements in the germline? Trends Genet. 13: 469-470.			
		BODE ET AL., 1988. Chromatin domain surrounding the human interferon-beta gene as defined by scaffold-attached regions. Biochemistry 27: 4706-11.			
		BONIFER ET AL, 1994. Dissection of the locus control function located on the chicken lysozyme gene domain in transgenic mice. Nucleic Acids Res 22: 4202-4210.			
		BONIFER ET AL. 1996. Regulation of the chicken lysozyme locus in transgenic mice. Crit Rev Eukaryot Gene Expr 6: 285-297.			
		BONIFER ET AL., (1991). Dynamic chromatin: the regulatory domain organization of eukaryotic gene loci. J. Cell. Biochem. 47: 99-108.			
		BONIFER ET AL., 1990. Tissue specific and position independent expression of the complete gene domain for chicken lysozyme in transgenic mice. EMBO J. 9: 2843-2848.			
DS		BONIFER ET AL., 1996. Prerequisites for tissue specific and position independent expression of a gene locus in transgenic mice. J Mol Med 74: 663-671.			
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DS		BORRELLI ET AL., (1988). Targeting of an inducible toxic phenotype in animal cells. Proc. Natl. Acad. Sci. USA 85: 7572-7576.			
		BOULIKAS (1995). Chromatin domains and prediction of MAR sequences. Intl Rev Cytol 162A: 279-388.			
		CAI ET AL., 1995. Modulation of enhancer-promoter interactions by insulators in the Drosophila embryo. Nature 376: 533-536.			
		CAI ET AL., 2001. Effects of cis arrangement of chromatin insulators on enhancer-blocking activity. Science. 291: 493-495.			
		CALDOVIC ET AL., (1995). Development of position-independent expression vectors and their transfer into transgenic fish. Mol. Mar. Biol. Biotech. 4: 51-61.			
		CALDOVIC ET AL., (1999). Position-independent expression and germline transmission of transgenic DNA in zebrafish. Trans. Res. 8: 321-334.			
		CARLSON ET AL., (2003). "Transposon mutagenesis of the mouse germline." Genetics 165:243-256.			
		CARVAN ET AL., (2001). Oxidative stress in zebrafish cells: potential utility of transgenic zebrafish as a deployable sentinel for site hazard ranking. Sci. Total Environ. 274: 183-196.			
		CARVAN ET AL., (2000). Transgenic Zebrafish as Sentinels for Aquatic Pollution. Ann NY Acad Sci. 919:133-47.			
		CAVAZZANA-CALVO ET AL., 2000. Gene therapy of human severe combined immunodeficiency (SCID)-X1 disease. Science. 288: 669-672.			
		CHUNG ET AL., (1997). Characterization of the chicken b-globin insulator. Proc. Natl. Acad. Sci. USA 94: 575-580.			
DS		CHUNG ET AL., 1993. A 5' element of the chicken beta-globin domain serves as an insulator in human erythroid cells and protects against position effect in Drosophila. Cell 74: 505-514.			
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				First Named Inventor	Hackett et al.
				Art Unit	1646 1636
				Examiner Name	Unknown D. Sullivan
Sheet	4	of	23	Attorney Docket Number	3021.15US02
NON PATENT LITERATURE DOCUMENTS					
EXAMINER INITIAL*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published			T ²
DS		CLARK ET AL. (2004). "Transposon vectors for gene-trap insertional mutagenesis in vertebrates" (submitted). <i>Genesis</i> 39:225-233			
		COCKERILL, 1990. Nuclear matrix attachment occurs in several regions of the IgH locus. <i>Nucleic Acids Res</i> 18: 2643-2648.			
		COCKERILL ET AL, 1986. Chromosomal loop anchorage sites appear to be evolutionarily conserved. <i>FEBS Lett</i> 204: 5-7.			
		COCKERILL, ET AL, 1987. The enhancer of the immunoglobulin heavy chain locus is flanked by presumptive chromosomal loop anchorage elements. <i>J Biol Chem</i> 262: 5394-5397.			
		COOK, 1995. A chromomeric model for nuclear and chromosome structure. <i>J Cell Sci</i> 108: 2927-2935 2004			
		CONVERSE ET AL. (2003). "Counterselection and co-delivery of transposon and transposase functions for the study of mediated transposition in cultured mammalian cells." Som. Cell Mol. Genet. (in press) . <i>Biosci. Rep.</i> 24:577-594			
		CUI ET AL. (2002); "Structure-function analysis of the inverted terminal repeats of the sleeping beauty transposon." <i>J. Mol. Biol.</i> 318: 1221-1235.			
		CULP ET AL., 1991. High-frequency germ-line transmission of plasmid DNA sequences injected into fertilized zebrafish eggs. <i>Proc Natl Acad Sci USA</i> 88: 7953-7957.			
		CUNNINGHAM, ET AL., 1994. The regulatory element 3' to the a gamma-globin gene binds to the nuclear matrix and interacts with special A-T-rich binding protein 1 (SATB1), an SAR/MAR-associating region DNA binding protein. <i>Blood</i> 84: 1298-1308.			
DS		DAVIDSON ET AL. (2003). "Efficient gene delivery and gene expression in zebrafish using the <i>Sleeping Beauty</i> Transposon." <i>Dev. Biol.</i> 263:191-202			
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DS		DAVIE 1996. Histone modifications, chromatin structure, and the nuclear matrix. J Cell Biochem 62: 149-557.			
		DICKINSON ET AL., 1992. A tissue-specific MAR/SAR DNA-binding protein with unusual binding site recognition. Cell 70: 631-645.			
		DILLON ET AL, 1993. Transcriptional regulation of multigene loci: multilevel control. Trends Genet 9: 134-137.			
		DISIMONE, ET AL., 2001. The sea urchin sns insulator blocks CMV enhancer following integration in human cells. Biochem Biophys Res Comm 284: 987-992.			
		DOEFLER (1992). DNA methylation: eukaryotic defense against the transcription of foreign genes. Microbial. Pathogenesis 12: 1-8.			
		DOVE (2000). Milking the genome for profit. Nature Biotech. 18: 1045-1048.			
		DUNAWAY ET AL., 1997. The activity of the scs and scs' insulator elements is not dependent on chromosomal context. Mol Cell Biol 17: 182-189.			
		DUPUY ET AL., (2001). "Transposition and gene disruption in the male germline of the mouse." Genesis 30: 82-88.			
		DUPUY ET AL., (2002). "Mammalian germ-line transgenesis by transposition." Proc. Natl. Acad. Sci. USA 99: 4495-4499.			
DS		EBERHARTER, ET AL, 1993. Nuclear matrix of the lower eukaryote Physarum polycephalum and the mammalian epithelial LLC-PK1 cell line. A comprehensive investigation of different preparation procedures. Eur J Biochem 212: 573-580.			
EXAMINER SIGNATURE	/Daniel Sullivan/			DATE CONSIDERED	08/22/2006
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DS		EISSENBERG ET AL., 1995. Epigenetic regulation in Drosophila: a conspiracy of silence, p. 147-171. In S. C. R. Elgin (ed.), Chromatin Structure and Gene Expression. Oxford University Press, Oxford.			
		ELLIS ET AL., 2001. The b-globin locus control region versus gene therapy vectors: A struggle for expression. Clin. Genet 59: 17-24.			
		FAHRENKRUG ET AL., (1999). Dicistronic gene expression in developing zebrafish. Mar. Biotech. 1: 552-561.			
		FARRELL ET AL., 2002. Conserved CTCF insulator elements flank the mouse and human beta-globin loci. Mol Cell Biol. 22: 3820-3831.			
		FILIPPOVA ET AL., 2001. CTCF-binding sites flank CTG/CAG repeats and form a methylation-sensitive insulator at the DM1 locus. Nature Genet 28: 335-343.			
		FISCHER ET AL., (2001). "Regulated transposition of a fish transposon in the mouse germ line." Proc. Natl. Acad.Sci. USA 98: 6759-6764.			
		FORRESTER ET AL, 1999. Nuclear matrix attachment regions antagonize methylation-dependent repression of long-range enhancer-promoter interactions. Genes Dev 13: 3003-3014.			
		FORRESTER ET AL., 1994. Dependence of enhancer-mediated transcription of the immunoglobulin m gene on nuclear matrix attachment regions. Science 265: 1221-1227.			
		GAUSE ET AL., 2001. Insulation of enhancer-promoter communication by a gypsy transposon insert in the Drosophila cut gene: Cooperation between suppressor of hairy-wing and modifier of mdg4 proteins. Mol Cell Biol 21: 4807-4817.			
DS		GASZNER ET AL., 1999. The Zw5 protein, a component of the scs chromatin domain boundary, is able to block enhancer-promoter interaction. Genes Dev 13: 2098-2107.			
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DS		GDULA ET AL., 1996. Genetic and molecular analysis of the gypsy chromatin insulator of Drosophila. Proc Natl Acad Sci USA 93: 9378-9383.			
		GERASIMOVA ET AL., 1995. A Drosophila protein that imparts directionality on a chromatin insulator is an enhancer of position-effect variegation. Cell 82: 587-597.			
		GERASIMOVA, ET AL., 2000. A chromatin insulator determines the nuclear localization of DNA. Mol Cell 6: 1025-1035.			
		GEURTS ET AL (2003). "Gene transfer into genomes of human cells by the Sleeping Beauty transposon system." Mol. Therap. 8: 108-117.			
		GEYER ET AL., 1997. The role of insulator elements in defining domains of gene expression. Curr Op Genet & Devel 7: 242-248.			
		GHOSH ET AL, 2001. Interactions between the Su[Hw] and Mod(mdg4) protein required for gypsy insulator function. EMBO J 20: 2518-2527.			
		GIBBS ET AL, 1994. An in vivo screen for the luciferase transgene in zebrafish. Mol Mar Biol Biotechnol 3: 307-316.			
		GORYSHIN ET AL., (2000). Insertional transposon mutagenesis by electroporation of released Tn5 transposition complexes. Nature Biotech. 18: 97-100.			
		GOTTSCHLING ET AL, 1990. Position effect at S. cerevisiae telomeres: reversible repression of Pol II transcription. Cell 63: 751-762.			
		GRABHER ET AL.(2003). "Transposon-mediated enhancer trapping in medaka." Gene. 322: 57-66.			
		GREER ET AL, 1990. Myeloid expression of the human c-fps/fes proto-oncogene in transgenic mice. Mol Cell Biol 10: 2521-2527.			
DS		HACEIN-BEY-ABINA ET AL, (2003) LMO2-Associated Clonal T Cell Proliferation in Two Patients after Gene Therapy for SCID-X1 302(17): 415-419.			
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DS		HACEIN-BEY-ABINA ET AL., 2002. Sustained correction of X-linked severe combined immunodeficiency by ex vivo gene therapy. New Eng. J. Med.. 346: 1185-1193.			
		HACKETT ET AL., (1999). Development of genetic tools for transgenic animals. IN Transgenic Animals in Agriculture. CAB International, Wallingford, UK. 19-35.			
		HACKETT ET AL., (2000). The molecular genetics of transgenic fish. Recent Adv. Mar. Biotech. 4:77-145.			
		HACKETT ET AL., (2003). Applications of transposable elements in fish for transgenesis and functional genomics. In Fish Developmental Biology and Genetics. (Zhiyuan Gong and Vladimir Korzh, eds.) (in press).			
		HAGSTROM ET AL., 1996. Fab-7 functions as a chromatin domain boundary to ensure proper segment specification by the Drosophila bithorax complex. Genes Dev 10: 3202-3215.			
		HAKES ET AL., 1991. Molecular cloning of matrix F/G: A DNA binding protein of the nuclear matrix that contains putative zinc finger motifs. Proc Natl Acad Sci USA 88: 6186-6190.			
		HARK ET AL., 2000. CTCF mediates methylation-sensitive enhancer-blocking activity at the H19/Igf2 locus. Nature 405: 486-489.			
		HARRIS ET AL (2002). "Construction of a Tc1-like transposon Sleeping Beauty-based gene transfer plasmid vector for generation of stable transgenic mammalian cell clones." Anal. Biochem. 310: 15-26.			
		HARRISON ET AL, 1993. A leucine zipper domain of the suppressor of Hairwing protein mediates its repressive effect on enhancer function. Genes Dev 7: 1966-1978.			
DS		HART ET AL., 1997. The scs' boundary element: characterization of boundary element-associated factors. Mol Cell Biol 17: 999-1009.			
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DS		HASTIE ET AL. 1976. The expression of three abundance classes of messenger RNA in mouse tissues. Cell 9: 761-764.			
		HODGKIN ET AL, (1998). Changing styles in C. elegans genetics. Trends Genet. 14: 352-357.			
		HOFFMAN ET AL., (2000). Transposon insertional mutagenesis and direct sequencing of microbial genomes. Genetica 108: 19-24.			
		HOLMGREN ET AL., 2001. CpG methylation regulates the Ifg2/H19 insulator. Curr Biol. 11: 1128-1130.			
		HORIE ET AL., (2001). "Efficient chromosomal transposition of a Tc1/mariner- like transposon Sleeping Beauty in mice." Proc. Natl. Acad. Sci. USA 98: 9191- 9196.			
		HORIE ET AL., (2003) "Characterization of Sleeping Beauty transposition and its application to genetic screening in mice." Mol. Cell. Biol. 23: 9189-9207.			
		HOZAK ET AL., 1995. Lamin proteins form an internal nucleoskeleton as well as a peripheral lamina in human cells. J Cell Sci 108: 635-644..			
		HUGHES ET AL., 1995. On the structure of replication and transcription factories. J Cell Sci 19: 59-65.			
		INOUE ET AL., 1999. Position-independent human b-globin gene expression mediated by a recombinant Adeno-associated virus vector carrying the chicken b-globin insulator. J Hum Genet 44: 152-162.			
		ISVAK ET AL., (2002). "Involvement of a bifunctional, paired-like DNA-binding domain and a transpositional enhancer in Sleeping Beauty transposition." J. Biol. Chem. 277: 34581-34588.			
		IVICS ET AL, (1997). Molecular reconstruction of Sleeping Beauty, a Tc1-like transposon from fish, and its transposition in human cells. Cell 91: 501-510.			
DS		IVICS ET AL., (1999). Genetic applications of transposons and other repetitive elements in zebrafish. IN Detrich, H.W., M. Westerfield, and L.I. Zon (eds.) The Zebrafish: Genetics and Genomics Meth. Cell Biol. 60: 99-131.			
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DS		IVICS ET AL.(2004). "The Sleeping Beauty transposable element: evolution, regulation and genetic applications." Curr. Issues Mol. Biol. 6: 43-55.; 11.			
		IZSVÁK ET AL., (1997). Repetitive elements and their genetic applications in zebrafish. Biochem. Cell Biol. 75: 507-523.			
		IZSVÁK ET AL., (2000). "Sleeping Beauty, a wide host range transposon vector for genetic transformation in vertebrates." J. Mol. Biol. 302: 93-10.			
		IZSVÁK ET AL., (2004). Sleeping Beauty transposition: biology and applications for molecular therapy. Mol. Therap.: in press 9:147-156			
		IZSVÁKS (2004). Healing the wounds inflicted by Sleeping Beauty transposon by double-strand break repair in mammalian somatic cells. Mol. Cell. in press .			13 : 279
		JACK ET AL, 1991. Expression of the cut locus in the Drosophila wing margin is required for cell type specification and is regulated by a distant enhancer. Development 113: 735-747.			
		JACKSON ET AL, 1988. A gentle method for preparing cyto- and nucleoskeletons and associated chromatin. J Cell Sci 90: 365-378.			
		JACKSON ET AL, 1993. Visualization of focal sites of transcription within human nuclei. EMBO J 12: 1059-1065.			
		JACKSON ET AL, 1985. A general method for preparing chromatin containing intact DNA. EMBO J 4: 913-918.			
		JACKSON ET AL., 1985. Transcription occurs at a nucleoskeleton. EMBO J 4: 919-925.			
		JACKSON ET AL., 1995. The structural basis of nuclear function. Intl Rev Cytol 162A: 125-149.			
DS		JAENISCH (1988). Transgenic animals. Science 240: 1468-1474.			
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				Filing Date	January 15, 2004
				First Named Inventor	Hackett et al.
				Art Unit	1646 1636
				Examiner Name	Unknown D. Sullivan
Sheet	11	of	23	Attorney Docket Number 3021.15US02	
NON PATENT LITERATURE DOCUMENTS					
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DS		KALOS ET AL., 1995. Position-independent transgene expression mediated by boundary elements from the apolipoprotein B chromatin domain. Mol Cell Biol 15: 198-207.			
		KANDURI ET AL, 2000. Functional association of CTCF with the insulator upstream of the H19 gene is parent of origin-specific and methylation-sensitive gene. Curr Biol 10: 853-856.			
		KARSI ET AL.(2001) "Effects of insert size on transposition efficiency of the Sleeping Beauty transposon in mouse cells." Mar. Biotechnol. 3: 241-245.			
		KELLUM ET AL, 1992. A group of scs elements function as domain boundaries in an enhancer-blocking assay. Mol Cell Biol 12: 2424-231.			
		KELLUM ET AL., (1991). A position-effect assay for boundaries of higher order chromosomal domains. Cell 64: 941-950.			
		KIM ET AL, 1996. The DNA-binding and enhancer-blocking domains of the Drosophila suppressor of Hairy-wing protein. Mol Cell Biol 16: 3381-3392.			
		KLINAKIS ET AL, (2000). Genome-wide insertional mutagenesis in human cells by the Drosophila mobile element Minos. EMBO Reports 1: 416-421.			
		KORNBERG ET AL., 1992. Chromatin structure and transcription. Ann Rev Cell Biol 8: 563-587.			
		KREBS ET AL, 1996. DNA length is a critical parameter for eukaryotic transcription in vivo. Mol Cell Biol 16: 5821-5829.			
		KREBS ET AL., (1998). The scs and scs' insulator elements impart a cis requirement on enhancer-promoter interactions. Mol Cell 1: 301-308.			
		KREN ET AL. (2003). "Hepatocyte-targeted delivery of Sleeping Beauty mediates efficient gene transfer in vivo." Gene Ther. Mol. Biol. 7: 229- 38.			
DS		KREN ET AL., (1998). In vivo site-directed mutagenesis of the factor IX gene by chimeric RNA/DNA oligonucleotides. Nature Medicine 4: 285-290.			
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DS		KREN ET AL., (2002). "Gene therapy as an alternative to liver transplantation." Liver Transpl. 8:1089-1108.			
		LABRADOR ET AL, 2002. Setting the boundaries of chromatin domains and nuclear organization. Cell 111: 151-154.			
		LAEMMLL ET AL., 1992. Scaffold-associated regions: cis-acting determinants of chromatin structural loops and functional domains. Curr Opin Genet Dev 2: 275-285.			
		LEVY-WILSON ET AL., 1989. The limits of the DNase I-sensitive domain of the human apolipoprotein B gene coincide with the locations of chromosomal anchorage loops and define the 5' and 3' boundaries of the gene. J Biol Chem 264: 21196-21204.			
		LI ET AL, 1999. Locus control regions: coming of age at a decade plus. Trends Genet. 15: 403-408.			
		LI ET AL., 1994. Hypersensitive site 5 of the human b locus control region functions as a chromatin insulator. Blood 84: 1399-1401.			
		LI ET AL., (1998). "Inversion and transposition of Tc1 transposon of C. elegans in mammalian cells." Somat. Cell. Mol. Genet. 24: 363-369.			
		LIN ET AL, 1994. lacZ expression in germline transgenic zebrafish can be detected in living embryos. Dev Biol 161: 77-83.			
		LIU ET AL., (2003). "Excision of Sleeping Beauty transposons: parameters and applications to gene therapy." J. Gene Medicine (<i>in press</i>). 6: 574-83 2004			
DS		LU ET AL., 1997. A transcriptional insulator element, the su(HW) binding site, protects a chromosomal DNA, replication origin from position effects. Mol Cell Biol 17: 2202-2206.			
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DS		LUDÉRUS, ET AL., 1992. Binding of matrix attachment regions to lamin B1. Cell 70: 949-959.			
		LUDÉRUS, ET AL., 1994. Binding of matrix attachment regions to lamin polymers involves single-stranded regions and the minor groove. Mol Cell Biol 14: 6297-6305.			
		LUO ET AL., (1998). "Chromosomal transposition of a Tc1/mariner-like element in mouse embryonic stem cells." Proc. Natl.Acad. Sci. U S A 95: 10769-10773.			
		MARSHALL (2002). Clinical research. Gene therapy a suspect in leukemia-like disease. Science. 298:34-35.			
		MARTIENSSEN (1998). Transposons, DNA methylation and gene control. Trends Genet. 14: 263-264.			
		MARTIN ET AL. (1999). A role for DNA methylation in gastrulation and somite patterning. Dev. Biol. (in press).			
		MARTIN ET AL., (1995). Genotype specific modifiers of transgene methylation and expression in zebrafish, Danio rerio. Genet. Res. Camb. 65: 21028.			
		MCKNIGHT ET AL., (1992) Matrix-attachment regions can impart position-independent regulation of a tissue-specific gene in transgenic mice. Proc. Natl. Acad. Sci. USA 89: 6943-6947.			
DS		MCKNIGHT ET AL., 1996. Severe position effects imposed on a 1 kb mouse whey acidic protein gene promoter are overcome by heterologous matrix attachment regions. Mol Reprod Dev. 44: 179-184.			
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				Art Unit	4646 1636
				Examiner Name	Unknown D. Sullivan
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DS		MELFI ET AL., 2000. Functional characterization of the enhancer blocking element of the sea urchin early histone gene cluster reveals insulator properties and three essential cis-acting sequences. J Mol Biol 304: 753-763.			
		MIKKELSEN ET AL., (2003) Helper-independent Sleeping Beauty transposon-transposase vectors for efficient nonviral gene delivery and persistent gene expression in vivo. Mol. Therapy 8: 654-665.			
		MILOT ET AL., (1996). Position effects and genetic disease. Trends Genet. 12: 123-126.			
		MIRKOVITCH ET AL., 1984. Organization of the higher-order chromatin loop: specific DNA attachment sites on nuclear scaffold. Cell 39: 223-2232.			
		MISKEY ET AL. (2003). "The Frog Prince: a reconstructed transposon from Rana pipiens with high transpositional activity in vertebrate cells." Nucleic Acids Res. 31: 6873-6881.			
		MITCHELL ET AL., 1989. Transcriptional regulation in mammalian cells by sequence-specific DNA binding proteins. Science 245: 371-378.			
		MIYNAROVA ET AL., 1994. Reduced position effect in mature transgenic plants conferred by the chicken lysozyme matrix-associated region. Plant Cell 6: 417-426.			
		MODELELL ET AL., 1983. Drosophila melanogaster mutations suppressible by the suppressor of Hairy-wing are insertions of a 7.3-kilobase mobile element. Proc Natl Acad Sci USA 80: 1678-1682.			
		MONGELARD ET AL., 2001. Two insulators are not better than one. Nature Struct. Biol. 8: 192-194.			
DS		MONTINI ET AL., (2002). "In Vivo Correction of Murine Tyrosinemia Type I by DNA-Mediated Transposition." Mol. Therapy 6: 759-769.			
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DS		MORGAN ET AL., (1996). Transposon tools for recombinant DNA manipulation: Characterization of transcriptional regulators from yeast, <i>Xenopus</i> , and mouse. <i>Proc. Natl. Acad. Sci. USA</i> 93: 2801-2806.			
		MORRIS ET AL, 1998. Two modes of transvection: Enhancer action in trans and bypass of a chromatin insulator in cis. <i>Proc Natl Acad Sci USA</i> 95: 10740-10745.			
		MUIR ET AL., (2002). Assessment of possible ecological risks and hazards of transgenic fish with implications for other sexually reproducing organisms. <i>Transgenic Res.</i> 11: 101-114.			
		MURAVYOVA ET AL., 2001. Loss of insulator activity by paired Su(Hw) chromatin insulators. <i>Science</i> 291: 495-498.			
		MUTSKOV ET AL, 2002. The barrier function of an insulator couples high histone acetylation levels with specific protection of promoter DNA from methylation. <i>Genes Dev</i> 16: 1540-1554.			
		NAKAGOMI ET AL.,1994. A novel DNA-binding motif in the nuclear matrix attachment DNA-binding protein SATB1. <i>Mol Cell Biol</i> 14:1852-1860.			
		NAKAYASU ET AL, 1991. Nuclear matrins: identification of the major nuclear matrix proteins. <i>Proc Natl Acad Sci USA</i> 88: 10312-10316.			
		NAMCIU ET AL, 1998. Human matrix attachment regions insulate transgene expression from chromosomal position effects in <i>Drosophila melanogaster</i> . <i>Mol Cell Biol</i> 18: 2382-2391.			
		NIILER (2000). FDA, researchers consider first transgenic fish. <i>Nature Biotech.</i> 18: 143.			
DS		OKI ET AL, 2002. Blockers and barriers to transcription: competing activities? <i>Curr Opin Cell Biol</i> 14: 299-304.			
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DS		O'NEILL ET AL., (1998) Undermethylation associated with retroelement activation and chromosome remodelling in an interspecific mammalian hybrid. Nature 393: 68-72.			
		ORTIZ-URDA ET AL., (2003). "Sustainable correction of junctional epidermolysis bullosa via transposonmediated nonviral gene transfer." Gene Therapy 10: 1099-1104.			
		PALLA, ET AL., 1997. Enhancer blocking activity located near the 3' end of the sea urchin early H2A histone gene. Proc Natl Acad Sci USA. 94: 2272-2277.			
		PALMITER ET AL, 1993. Distal regulatory elements from the mouse metallothionein locus stimulate gene expression in transgenic mice. Mol Cell Biol 13: 5266-5275.			
		PANNELL ET AL., Silencing of gene expression: implications for design of retrovirus vectors. Rev MedVirol 11: 205-217.			
		PARKHURST ET AL, 1988. The Drosophila su(Hw) gene, which controls the phenotypic effect of the gypsy transposable element, encodes a putative DNA-binding protein. Genes Dev 2: 1205-1215.			
		PAWLOWSKI ET AL (1998). Transgenic DNA integrated into the oat genome is frequently interspersed by host DNA. Proc. Natl. Acad. Sci. USA 95: 12106-12110.			
		PEIFER ET AL, 1988. Sequences of the gypsy transposon of Drosophila necessary for its effects on adjacent genes. Proc Natl Acad Sci USA 85: 9650-9654.			
		PEIFER ET AL., 1986. The anterobithorax and bithorax mutations of the bithorax complex. EMBO J 5: 2293-2303.			
DS		PHI-VAN ET AL., (1990). The chicken lysozyme 5' matrix attachment region increases transcription from a heterologous promoter in heterologous cells and dampens position effects on the expression of transfected genes. Mol. Cell. Biol. 10: 2302-2307.			
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DS		PHI-VAN ET AL 1988. The matrix attachment regions of the chicken lysozyme gene co-map with the boundaries of the chromatin domain. EMBO J 7: 655-664.			
		PIENTA ET AL., 1991. Cell structure and DNA organization. CRC Criti Rev Euk Gene Exp 1: 355-385.			
		PIKAART ET AL., (1998) Loss of transcriptional activity of a transgene is accompanied by DNA methylation and histone deacetylation and is prevented by insulators. Genes Dev. 12: 2852-2862.			
		PILLUS ET AL., 1995. Chromatin structure and epigenetic regulation in yeast, p. 123-146. In S. G. R. Elgin (ed.), Chromatin Structure and Gene Expression. Oxford University Press, Oxford.			
		PLASTERK ET AL. (1999). "Resident aliens: the Tc1/mariner superfamily of transposable elements." Trends Genet. 15: 326-332.			
		POMBO ET AL., 1996. The localization of sites containing nascent RNA and splicing factors. Exp Cell Res 229: 201-203.			
		PORTER ET AL., 1999. Distal upstream tyrosinase S/MAR-containing sequences has regulatory properties specific to subsets of melanocytes. Dev Genet 25: 40-48.			
		PRAK ET AL., (2000). Mobile elements and the human genome. Nature Genet. Rev. 1: 134-144.			
		PRIOLEAU ET AL, 1999. An insulator element and condensed chromatin region separate the chicken b-globin locus from an independent regulated erythroid-specific folate receptor gene. EMBO J. 18: 4035-4048.			
		RECILLAS-TARGA, ET AL., (1999). Positional enhancer-blocking activity of the chicken b-globin insulator in transiently transfected cells. Proc. Natl. Acad. Sci. USA 96: 14354-14359.			
DS		REICHARDT. (2000). Will souped up salmon sink or swim? Nature 406: 10-12.			
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DS		RENAULD ET AL., 1993. Silent domains are assembled continuously from the telomere and are defined by promoter distance and strength, and SIR3 dosage. Genes Dev 7: 1133-1145.			
		REUTER ET AL., 1981. Isolation of dominant suppressor mutations for position-effect variegation in Drosophila melanogaster. Mol Gen Genet 182: 516-519.			
		RICHARDS ET AL., 2002. Epigenetic codes for heterochromatin formation and silencing: rounding up the usual suspects. Cell 108: 489-500.			
		RICHARDSON ET AL. (2002). "Gene repair and transposon-mediated gene therapy." Stem Cells 20: 105-118.			
		RICHARDSON ET AL. (2002). "Strategies for hepatic gene correction." J Drug Target 10: 133-141.			
		RIVELLA ET AL, 2000. The cHS4 insulator increases the probability of retroviral expression at random chromosomal integration sites. J Virol 74: 4679-4687.			
		ROBERG-PEREZ ET AL. (2003). "MTID: a database of Sleeping beauty transposon insertions in mice." Nucl. Acids Res.31: 78-81.			
		ROMIG ET AL, 1992. Characterization of SAF-A, a novel nuclear DNA binding protein from HeLa cells with high affinity for nuclear matrix/scaffold attachment DNA elements. EMBO J 11: 3431-3440.			
		ROSEMAN ET AL., 1993. The su(Hw) protein insulates expression of the Drosophila melanogaster white gene from chromosomal position-effects. EMBO J 12: 435-442.			
DS		SCHEDL ET AL., 1995. Domains and boundaries, p. 172-196. In E. SCR. (ed.), Chromatin Structure and Gene expression. Oxford University Press, Oxford.			
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				First Named Inventor	Hackett et al.
				Art Unit	1646 1636
				Examiner Name	Unknown D. Sullivan
Sheet	19	of	23	Attorney Docket Number	3021.15US02
NON PATENT LITERATURE DOCUMENTS					
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DS		SCOTT ET AL, 1995. Effects of the su(Hw) insulator protein on the expression of the divergently transcribed Drosophila yolk protein genes. EMBO J 14: 6258-6267.			
		SHERF ET AL., (1996). Dual luciferase reporter assays: An advanced co-reporter technology integrating firefly and Renilla luciferase assays. Promega Notes 57: 2-9.			
		SHERRATT (1995). Mobile Genetic Elements. IRL Press Oxford.			
		SIMMEN ET AL., (1999). Nonmethylated transposable elements and methylated genes in a chordate genome. Science 283: 1164-1167.			
		SINGER ET AL, 1997. Compartmentalization of eukaryotic gene expression: causes and effects. Cell 91: 291-294.			
		SMITH ET AL, 1992. The suppressor of Hairy-wing binding region is required for gypsy mutagenesis. Mol Gen Genet 233: 65-70.			
		STEINWAERDER ET AL., 2000. Insulation from viral transcriptional regulatory elements improves inducible transgene expression from adenovirus vectors in vitro and in vivo. Gene Ther 7: 556-567.			
		STIEF ET AL, 1989. A nuclear DNA attachment element mediates elevated and position-independent gene activity. Nature 341:343-5.			
		STRAHL ET AL., 2000. The language of covalent histone modifications. Nature 403: 41-45.			
DS		STUART ET AL, 1988. Replication, integration and stable germ-line transmission of foreign sequences injected into early zebrafish embryos. Development 103:403-12.			
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ds		STUART ET AL., 1990. Stable lines of transgenic zebrafish exhibit reproducible patterns of transgene expression. Development 109:577-84.			
		THOMPSON ET AL, 1994. Scaffold attachment regions stimulate HSP70.1 expression in mouse preimplantation embryos but not in differentiated tissues. Mol Cell Biol 14:4694-703.			
		THOREY ET AL, 1993. Alu sequence involvement in transcriptional insulation of the keratin 18 gene in transgenic mice. Mol Cell Biol 13:6742-51.			
		TILGHMAN ET AL., 1995. Epigenetic regulation in mammals, p. 197-222. In S. C. R. Elgin (ed.), Chromatin Structure and Gene Expression. Oxford University Press, Oxford.			
		TWEEDIE ET AL., (1997). Methylation of genomes and genes at the invertebrate-vertebrate boundary. Mol. Cell. Biol. 17: 1469-1475.			
		UDVARDY ET AL, 1991. Chromatin structure, not DNA sequence specificity, is the primary determinant of topoisomerase II sites of action in vivo. Mol Cell Biol 11:4973-84.			
		UDVARDY ET AL., 1993. The dynamics of chromatin condensation: redistribution of topoisomerase II in the 87A7 heat shock locus during induction and recovery. Mol Cell Biol 13:7522-30.			
		UDVARDY ET AL., 1985. The 87A7 chromomere. Identification of novel chromatin structures flanking the heat shock locus that may define the boundaries of higher order domains. J Mol Biol 185:341-58.			
DS		VERMA (1997). Gene therapy - promises, problems and prospects. Nature 389: 239-242.			
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DS		VERMA (2002). Success and setback: another adverse event. Mol. Ther. 6: 565-566.			
		VIGDAL ET AL. (2002). "Common physical properties of DNA affecting target site selection of Sleeping Beauty and other Tc1/mariner transposable elements." J. Mol. Biol. 323: 441-452; 8.			
		VON KRIES ET AL., 1991. A matrix/scaffold attachment region binding protein: identification, purification, and mode of binding. Cell 64:123-35.			
		VON KRIES ET AL., 1994. Chicken MAR binding protein p120 is identical to human heterogeneous nuclear ribonucleoprotein (hnRNP) U. Nucleic Acids Res 22:1215-20.			
		VON KRIES ET AL., 1994. Biochemical properties of attachment region binding protein ARBP. FEBS Lett 342:185-8.			
		WALTERS ET AL., 1999. The chicken beta-globin 5'HS4 boundary element blocks enhancer-mediated suppression of silencing. Mol Cell Biol 19: 3714-3726.			
		WEINTRAUB ET AL., 1981. α -globin-gene switching during the development of chicken embryos: expression and chromosome structure. Cell 24:333-344.			
		WEITZEL ET AL, 1997. Chicken MAR-binding protein ARBP is homologous to rat methyl-CpG-binding protein MeCP2. Mol Cell. Biol 17: 5656-5666.			
		WEST ET AL., 2002. Insulators: many functions, many mechanisms. Genes Dev. 16: 271-278.			
DS		WILSON ET AL, 1990. Position effects on eukaryotic gene expression. Annu Rev Cell Biol 6:679-714.			
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DS		WINN ET AL., (2000). Detection of mutations in transgenic fish carrying a bacteriophage lambda cII transgene target. Proc. Natl. Acad. Sci. USA 97: 12655-12660.			
		WOLFFE, 1994. Insulating chromatin. Curr. Biol. 4: 85-87.			
		WOODCOCK ET AL., 1993. A chromatin folding model that incorporates linker variability generates fibers resembling the native structures. Proc Natl Acad Sci USA 90: 9021-9025.			
		WOODCOCK, 1994. Chromatin fibers observed in situ in frozen hydrated sections - native fiber diameter is not correlated with nucleosome repeat length. J Cell Biol 125:11-19.			
		YANT ET AL., (2000) Somatic integration and long-term transgene expression in normal and haemophilic mice using a DNA transposon system. Nature Genetics 25: 35-41.			
		YANT ET AL., (2002). Transposition from a gutless adeno-transposon vector stabilizes transgene expression in vivo. Nature Biotech. 20: 999-1005.			
		YANT (2003). "Nonhomologous-end-joining factors regulate DNA repair fidelity during Sleeping Beauty element transposition in mammalian cells." Mol. Cell. Biol. 23: 8505-8518.			
		YIN ET AL., (2002) RNA-mediated gene regulation system: Now and the future (Review) International Journal Of Molecular Medicine, 10: 355-365.			
		YODER ET AL. (1997). Cytosine methylation and the ecology of intragenomic parasites. Trends Genet. 13: 335-340.			
DS		YU ET AL., 1994. A 5' b-globin matrix-attachment region and polyoma enhancer together confer position-independent transcription. Gene 139: 139-145.			
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DS		ZAYED ET AL. (2003). "The DNA bending protein HMGB1 is a cellular cofactor of Sleeping Beauty transposition." Nucleic Acids Res. 31: 2313-2322.			
		ZHAN ET AL., 2001. Insulator: from chromatin domain boundary to gene regulation. Hum Genet 109: 471-478.			
		ZHANG ET AL., (1994). Insertional mutagenesis of Drosophila heterochromatin with single P elements. Proc. Natl. Acad. Sci. USA91: 3539-3543.			
		ZHANG ET AL., (1999) High levels of foreign gene expression in hepatocytes after tail vein injections of naked plasmid DNA. Hum. Gene Ther. 10: 1735-1737.			
		ZHAO ET AL., 1995. Visualization of chromosomal domains with boundary element-associated factor BEAF-32. Cell 81: 879-889.			
DS		ZHOU ET AL, 1996. The Fab-7 element of the bithorax complex attenuates enhancer promoter interactions in the Drosophila embryo. Genes Dev 10: 31295-3201.			
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